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**AMPHIBIANS AND REPTILES FROM  
THE CARMEN MOUNTAINS, COAHUILA**

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Publication of the *Bulletin* was resumed in 1934 with volume 5 in the present format. It is now regarded as an outlet for short to moderate-sized original papers on natural history, in its broad sense, by members of the museum staff, members of the Academy, and for papers by other authors which are based in considerable part upon the collections of the Academy. It is edited by the Director of the Museum with the assistance of a committee from the Board of Scientific Governors. The separate numbers are issued at irregular intervals and distributed to libraries and scientific organizations, and to specialists with whom the Academy maintains exchanges. A reserve is set aside for future need as exchanges and the remainder of the edition offered for sale at a nominal price. When a sufficient number of pages have been printed to form a volume of convenient size, a title page, table of contents, and index are supplied to libraries and institutions which receive the entire series.

Howard K. Gloyd, Director of the Museum

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BY

HOWARD K. GLOYD AND HOBART M. SMITH

Since most collectors traveling in Mexico apparently have given scant attention to the territory immediately to the south of the International Boundary, material from any portion of this region is of more than passing interest. Three small collections of amphibians and reptiles have recently become available from the Carmen Mountains, a small range in the State of Coahuila some forty miles east of Boquillas on the Big Bend of the Rio Grande. The first of these consists of fifteen specimens collected in September, 1937, by Robert S. Sturgis of Chicago as a member of an expedition sponsored by the Bureau of Biological Survey, U. S. Department of Agriculture, and the Chicago Academy of Sciences. These specimens were deposited in the U. S. National Museum. The other two lots were collected by F. W. Miller, Director of the Dallas Museum of Natural History, with the active coöperation of E. M. Dealey and Raymond Foy of Dallas, Texas; twenty specimens in October and November, 1940, and eleven in October, 1941. These were presented to the museum of the Chicago Academy of Sciences, together with field notes from which quotations are made in this paper.

Of the Carmen Mountains, particularly of the vicinity of Carboneras Canyon, Tappan Gregory writes:\* "We found ourselves in a rough

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\*In "Lion in the Carmens," *Chicago Nat.*, vol. 1, 1938, p. 70-81, 110-120, a narrative of the expedition of 1937 for photographing mountain lion and other wild animals.

country, cut with many deep, rocky, steep-walled canyons, hemmed in by wooded peaks and sheer escarpments. The slopes of live oak, hosts to the parasitic mistletoe, alternated with the great ponderosas growing in fine stands, sometimes on the slopes and again in flat, open parks carpeted with lush grass. Several kinds of black oak also occurred and junipers three or four feet in diameter. The floor of the forest was liberally sprinkled with many varieties of blooming wild flowers, and with all this we found prickly pear, maguey and barrel cactus. It was a country of virgin timber. Any lumbering that may have been done was so far in the past that practically no visible signs remained, and apparently no fires had scarred the country for decades. . . . The mountain range itself, extending from northwest to southeast, rose to an estimated maximum altitude of ten thousand feet. The highest recorded and reported to us in the section near our camp was Loomis Peak, ninety-three hundred feet."

#### *Rana pipiens* Schreber

One from Carboneras Camp, 6500 ft., October 21, 1940 (CA 10486); four from Juarez Canyon, 5500 ft., October 25 and 26, 1940 (CA 10487-9), 4800 ft., October 19, 1941 (CA 10507); one from Botellas Canyon, 7200 ft., October 16, 1941 (CA 10506).

In these specimens the dorsal spots are few, large, irregular in outline, and without light borders. The throats of CA 10486-8 are heavily stippled with gray.

#### *Sceloporus microlepidotus disparilis* Stejneger

Four from Carboneras Canyon, September 13-October 3, 1937 (USNM 103696-9); three from Carboneras Camp, 6500 ft., October 21-22, 1940 (CA 10490-2); two from Diablo Canyon, 6000 ft., November 1, 1940 (CA 10493-4); one from Juarez Canyon, 5500 ft., October 26, 1940 (CA 10495); and one from Botellas Canyon, 6400 ft., November 3, 1940 (CA 10496).

The dorsal scales vary from 58 to 66 (58, two; 59, two; 60, two; 61, two; 62, two; 63, one; 66, one); femoral pores 11 to 15 (11, one; 12, one; 13, two; 14, nine; 15, ten).

#### *Sceloporus poinsettii* Baird and Girard

An adult male from Juarez Canyon, 5500 ft., October 28, 1940 (CA 10497); three from Carboneras Canyon, September 13 to October 3, 1937 (USNM 103693-5).

All have 34 dorsal scales from occiput to base of tail, and 11 or 12 femoral pores (11, three; 12, five). The coloration and other features of scutellation are typical.

*Sceloporus undulatus consobrinus* Baird and Girard

Two juvenile specimens from Botellas Canyon, 6400 ft., November 3, 1940 (CA 10498-9).

Dorsal scales 40, 36, respectively; scales around body 38, 44; femoral pores 16-18, 16-16; scales between pore series 4, 5.

*Gerrhonotus liocephalus infernalis* Baird

Seven from Carboneras Canyon, 6500 ft., September 13 to October 3, 1937 (USNM 103700-5) and October 22, 1940 (CA 10500); one from Juarez Canyon, 5500 ft., October 25, 1940 (CA 10501); two from Diablo Canyon, 6000 ft., October 15, 1941 (CA 10509-10); one from Botellas Canyon, 7200 ft., October 16, 1941 (CA 10511); and two from Oso Canyon, 7200 ft., October 28, 1941 (CA 10512-3).

Data on variation of certain features of scutellation are given in the accompanying table.

	Number	Dorsals	Loreals	Suboculars	Supra-labials	Body Bands	Length of Body (mm.)	Length of Tail (mm.)
USNM	103700	52	2-2	2-2	12-12	10	—	—
	103701	49	2-2	3-3	12-13	10	—	—
	103702	46	2-2	1-1	12-13	9	133	240
	103703	50	2-3	2-2	11-12	9	131	225
	103704	49	2-3	2-2	12-12	9	149	266
	103705	51	3-3	2-2	12-12	9	—	—
CA	10500	47	2-2	2-2	13-13	11	135	—
	10501	50	2-2	2-2	12-13	9	118	210
	10509	51	3-3	2-2	12-12	9	139	225
	10510	52	2-2	2-2	12-12	9	145	—
	10511	53	2-2	2-2	12-12	9	134	—
	10512	52	3-3	2-2	12-12	10	145	—
	10513	51	2-2	2-2	12-14	9	133	—

Postnasals 2-2 in all; preoculars 1-1 in all except USNM 103701 which has 2-2.

*Masticophis flagellum flavigularis* (Hallowell)

One from Juarez Canyon, 4800 ft., October 20, 1941 (CA 10515).

This is a juvenile male with a faint dorsal pattern of narrow transverse dashes slightly darker than the ground color. The dorsal plates of the head are narrowly outlined with white and both the preoculars and postoculars are conspicuously white. The chin and throat are spotted with brown. Scale rows 17-13, ventrals 195, caudals 80+ (tip of tail missing), supralabials 8, infralabials 10, preoculars 1, postoculars 2, temporals 2+2+2; total length 427+ mm.

*Elaphe bairdi* (Yarrow)

One from Carboneras Canyon, September 23, 1937 (USNM 103692).

- This specimen has already been described by Smith (*Copeia*, 1938, no. 3, p. 150).

*Thamnophis eques cyrtopsis* (Kennicott)

One from Carboneras Camp, 6500 ft., October 21, 1940 (CA 10502) and one from Juarez Canyon, 4800 ft., October 20, 1941 (CA 10514), both females.

In both these specimens the scale rows are 19-19-17, supralabials 8, infralabials 10, preoculars 1. CA 10502 has 172 ventrals, 82 caudals; postoculars 3, temporals 1+2+3, 1+3+4; total length 910 mm., tail 213 mm. CA 10514 has 173 ventrals, tip of tail missing; postoculars 3-4, temporals 1+2+3; total length 497+ mm. The black edging of the labials is unusually heavy. In CA 10514 the middorsal stripe is bright orange on the neck but pale yellow posteriorly.

On the basis of conclusions reached by one of us (Smith) in a study of Mexican species of *Thamnophis* now in progress, we feel justified in considering these specimens typical representatives of a northern race of *T. eques* for which the name *Eutaenia cyrtopsis* Kennicott is available. This name was proposed in 1860 (*Proc. Acad. Nat. Sci. Philadelphia*, p. 333) for a specimen from Rinconada, Coahuila. *T. eques cyrtopsis* ranges from central Sonora to eastern Coahuila, southward to southern San Luis Potosí, and northward to southern Utah; *T. eques eques* occurs on the southern part of the Mexican Plateau. The northern race (*cyrtopsis*) is differentiated from the southern (*eques*) by having 167 or more ventrals in males (86 per cent, as opposed to 3 per cent in *eques*), and 163 or more ventrals in females (100 per cent, as opposed to 3 per cent in *eques*). These differences are based upon the study of 53 males and 51 females. In addition, *cyrtopsis* over most of its range is characterized by having the middorsal light stripe involving parts of adjacent scale rows on various parts of the body, while *eques* has the middorsal stripe strictly confined to the vertebral row of scales. Toward the southern part of its range specimens of *cyrtopsis* have the middorsal stripe like that of *eques* but in that area the number of ventrals may be utilized as the chief diagnostic character.

*Crotalus lepidus lepidus* (Kennicott)

Three specimens: Carboneras Camp, 6500 ft., October 22, 1940 (CA 10503); Juarez Canyon, 5000 ft., October 27, 1940 (CA 10504); Diablo Canyon, 6000 ft., November 11, 1940 (CA 10505).

CA 10503 is a male with the following scutellation: scale rows 23, ventrals 163, caudals 25, supralabials 12; infralabials 10, body blotches

19, tail rings 4; total length 395 mm., tail 33 mm. CA 10504 and 10505 are females and have the following scutellation respectively: scale rows 23; ventrals 164, 160; caudals 21, 19; supralabials 12-12, 13-12; infralabials 10-10, 12-?; body blotches 20, 18; tail rings 4, 3; total length 425, 440 mm.; tail length 30, 30 mm.

In view of the known variability of this subspecies, these snakes do not differ essentially from specimens from Trans-Pecos Texas, except for a somewhat heavier dark mottling on the underside. There is no indication of the salmon color occasionally found in specimens from the Chisos Mountains. In CA 10503 the underside of the tail is yellow toward the tip.

The Diablo Canyon specimen, Mr. Miller writes, was taken at the base of a juniper on a fairly open southwest hillside in the act of catching a small swift (*Sceloporus microlepidotus disparilis*) which it had seized just above the right hind leg. "The lizard made occasional perfunctory efforts to escape and the snake equally occasional efforts to engulf its victim. Their equanimity was not shared, however, by another little swift which excitedly raced just above them in the lower branches of the juniper."

### ***Crotalus molossus molossus* Baird and Girard**

One from Carboneras Canyon, 6200 ft., September 17, 1937 (USNM 103738); another taken near the Carmen Mountain Club "Shack," Burro Canyon, 5000 ft; October 14, 1941 (CA 10516); both males.

The coloration of the specimen from Carboneras Canyon is unusual in that the first fifteen blotches are confluent so that the dorsal region for about half the length of the body is all black except for reduced light colored areas marking the interspaces between the blotches. Scale rows 31-27-21, ventrals 191, caudals 26, loreals 2-2, anterior nasals separated from first supralabials by a row of small scales; body blotches 31, tail all black; total length 1075 mm., tail 70 mm.

The specimen from Burro Canyon is similar in general coloration to the majority of specimens from western Texas. The entire muzzle is dark brown, the first eight dorsal blotches are confluent laterally, and the tail is all black. Scale rows 33-27-19, ventrals 188, caudals 25, supralabials 18-17, infralabials 20-19, loreals 3-2, anterior nasals separated from first supralabials by a row of small scales; body blotches 26; total length 870 mm., tail 60 mm.

Mr. Miller states that this snake and another (killed in Juarez Canyon, 4800 ft., but not saved) each had a full-grown wood rat in its stomach.